U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-180-EA

CASEFILE/PROJECT NUMBER (optional)**:** COC67991

PROJECT NAME: Williams/Ryan Gulch Gathering System & Gas Processing Plant

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado

T. 1 S., R. 98 W.,
Sec. 33, E½SW¼ .
T. 2 S., R. 97 W.,
Sec. 7, lot 8.
T. 2 S., R. 98 W.,
Sec. 4, lot 6, 7, 11, 14, 19;
Sec. 9, W½E½;
Sec. 16, NW¼NE¼, E½NW¼, N½SW¼, SW¼SW¼;
Sec. 20, lot 2, 7, 8, E½NE¼, SW¼NE¼;
Sec. 28, lot 4-6;
Sec. 29, lot 1.

APPLICANT: Williams Production RMT Company (Williams)

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: This environmental assessment (EA) addresses the Williams application for the construction, operation and maintenance of a natural gas pipeline gathering system and an associated processing plant and compressor facility in the Ryan Gulch area of the Piceance Basin, Rio Blanco County, Colorado (Figure 1). The gathering system would transport natural gas from three wells - Ryan Gulch 23-33, 22-28, and 23-7 - to the plant. From the plant, gas would be transported to the Questar natural gas transmission line (COC 0123685) that crosses Rio Blanco County Road (CR) 24 near the gas plant (Figure 2). Applications for Permit to Drill (APDs) have been approved for the three wells. The pipeline gathering system and the processing plant and compressor have been serialized as COC67991. The project includes 10.3 miles (54,400 feet) of buried pipeline and a ten acre area for the plant and compressor facility (three acres fenced).

The planned facilities, as noted during the on-site (August 19, 2004), are described below:

- 4-inch pipeline originating at well 23-33 – Construction of 11,200 feet of buried 4" pipeline, from the well pad to a junction with a new 8" pipeline and a 4" pipeline from another well pad, 22-28 (both described below). This 4" line will commence at the well (T1S, R98W, Sec. 33, NE¼SW¼), move west and be bored under CR 24, then turn south and roughly parallel the road on a ridge approximately 150 feet west of the road (continuing through T2S, R98W, Sec. 4, 9). In Sec. 9, CR 24 bends sharply to the east. Here, the pipeline will be trenched across CR 86 and terminate at the junction with the 8" line, 1,750 feet from the east line of Sec. 9.

- 4-inch pipeline originating at well 22-28 – Construction of 18,900 feet of 4" pipeline, from the well pad to a junction with a new 8" pipeline (described below) and the pipeline from well 23-33 (described above). This 4" line will commence at well 22-28 (T2S, R98W, Sec. 28, SE¼NW¼), move northwest following CR 85 on the south side into Sec. 29 and 20. At the junction with a two-track route in Sec. 20, the line will turn northeast, be trenched across CR 85, and follow the centerline of the two-track through sections 20, 21, 16, and 9 to the junction with the 8" line. For most of its length, the line would be buried but, as the pipeline descends into Ryan Gulch in Sec. 9, it would be constructed on the surface to minimize surface disturbance and visual impact. At the base of the hill, the pipeline would be buried again until its tie-in.

- 4-inch pipeline originating at well 23-7 – Construction of 4,900 feet of buried 4" pipeline, from the well to the proposed gas plant. This 4" line would commence at well 23-7 (T2S, R97W, Sec. 7, NE¼SW¼) and follow a two-track road, a spur of BLM Road 1019 north, through Sec. 7 and T2S, R98W, Sec. 12, tying in to the 8" line at the gas plant.

- 8-inch Pipeline – Construction of 19,400 feet of buried 8" pipeline, commencing about 1,750 feet from the east line of T2S, R98W, Sec. 9, and continuing eastward parallel to CR 24 (approximately 50 feet south of the centerline of the CR 24 right-of-way).

- Processing plant and compressor station – Construction of a natural gas processing plant and compressor station on ten acres (about three acres fenced) on the south side of CR 24 near the intersections of the 8" pipeline, the 4" line servicing well 23-7, and the Questar pipeline (COC 0123685) in T2S, R98W, Sec. 1 & 12, T2S, R97W, Sec. 7. The three-acre fenced facility would be almost entirely within Sec. 12. The plant would include two process heaters, an amine sweetening unit, a dehydration unit and a compressor station. The plant would be powered by three natural-gas fired Caterpillar G3512 engines rated at 888 horsepower each. The access road to the plant would be about 700 feet long.

- No staging areas are proposed on public land but a temporary use area on public land, 50 x 50 feet, would be necessary to accommodate the road bore on the west side of CR 24 in the NE¼SW¼ of Sec. 33, T1S, R98W. The boring equipment on the east side of CR 24 would be located on well pad 23-33.

Total initial disturbance is estimated at 85.9 acres, 74.9 acres for the pipelines (incorporating a 60 foot right-of-way width) and 11 acres for the proposed gas plant and access road. After

successful reclamation of the disturbed areas, long-term disturbance is estimated at 3-5 acres. Approximately 75% (64.8 acres) of project-related surface disturbance would be located on federal lands administered by BLM, 8% (6.5 acres) would be on DOW lands and 17% (14.5 acres) would be on private surface.

Buried pipeline installation will entail the trenching of surface such that the pipe will be buried with a minimum cover of 36 inches. The trench width would be 24 inches maximum. The four and eight-inch steel pipe will have welded joints and be fusion bonded (coated). Pipe will be welded on the surface and laid in the ditch. Material removed in the trenching process will be replaced as cover.

Typical Construction Equipment per Crew:

- Small Trucks (10-15) (Pick-up class) for 3-5 welding crews at a given time.
- Semi-Trucks (4-6) for hauling equipment and pipe.
- D-8 Cat (or comparable machinery) for sections of welded pipe.
- D-4 Trackhoe with side-boom for laying and positioning of pipe prior to welding.
- 1 Trencher and/or 2-3 track backhoes (if rock is encountered).
- Rubber-tired Hoe for digging and backfilling of ditches at road crossings.
- Motograder for the clearing of surface.
- Manpower – 2 crews of 15-20 will be present during the pipeline installation.

Stabilization and Rehabilitation:

- Re-contouring will be completed throughout route; reclamation will be as agreed to with the Authorized Officer. Upon completion, the route will be cleared of all trash and debris.
- A seed mixture will be designated by the Authorized Officer. Seeding will be done during fall planting season, September 15 through first frost.
- Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation.
- All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial water bar should be constructed at the top of the backslope.

Construction of the proposed pipeline is estimated to be completed in 60 days. Construction of the processing plant should take 30-60 days. Construction of the plant could occur at the same time as the gathering system or at another time.

No Action Alternative: None of the pipelines would be constructed and the gas plant and compressor station would not be built.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: A longer pipeline route (13.4 miles) that continued from the compressor station down Ryan Gulch to Piceance Creek and then turned north to an intersection with an American Soda natural gas line was

initially considered. This longer route was not considered further because the applicant had not acquired access to the American Soda line.

The applicant initially proposed a route from well 22-28 that went from CR 85 to Ryan Gulch on a line parallel to the currently proposed line about one mile to the east (from the NW of Sec. 28, T2S, R98W to the SW of Sec. 10., T2S, R98W). This line was rejected in favor of the current route because, although a shorter route, its terrain would have made construction more difficult.

Another alternative route from well 22-28 to Ryan Gulch would have traveled along CR 85 all the way to CR 86 in Ryan Gulch before turning northeast toward CR24 (from the NW of Sec. 28, T2S, R98W, northeast to the NE of Sec. 19, thence to the SE of Sec. 9). This route was not considered further because, in the relatively narrow canyon areas along the route, poor soil conditions would adversely affect the long-term stability of a pipeline. The narrow drainage appeared to be subject to flooding as debris-flow deposits were observed in the area and at an existing well head. The drainage slopes also had areas that were slumpy which indicated past slope instability and the likelihood of future slope movements.

NEED FOR THE ACTION: All of the proposed or potential actions analyzed in this EA are being pursued by Williams in order to exercise its federal mineral lease rights.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

Page 2-49: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The project area is within a Class II Prevention of Significant Deterioration (PSD) air quality area. No Class I PSD areas are within 40 miles of the project area.

The principal air quality parameter likely to be affected by construction of the pipelines and the natural gas processing plant and compressor is the inhalable particulate level (PM_{10} - particles ten microns or less in diameter) associated with fugitive dust. Although no monitoring data are available for the survey area, it can be surmised that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

The applicant's Construction Permit Application to the Colorado Department of Public Health and Environment (CDPHE) describes three engines to be located at the Ryan Gulch gas plant. The combined horsepower of the three engines operating at capacity would be 2,664 horsepower. The principal air quality parameters likely to be affected by operation of these compressor engines are nitrogen dioxide (NO_2) and carbon monoxide (CO). No data for background concentrations of these gases are available for the Piceance Basin but, because this is a rural area with few industrial facilities, background concentrations are assumed to be well below National Ambient Air Quality Standards (CO: 40,000 $\mu g/m^3$ second 1-hour maximum, 10,000 $\mu g/m^3$ second 8-hour maximum; NO_2: 100 $\mu g/m^3$ annual). (USDI BLM, 1999)

Environmental Consequences of the Proposed Action: The construction of the facilities proposed for the project area – the pipelines and the compressor station – would result in short term, local impacts on air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis. Following successful revegetation of the sites, airborne particulate matter should return to near pre-construction levels.

The operation of the compressor would generate near-field emissions that are assumed to be proportional to those estimated by BLM in Garfield County in 1999. (USDI BLM, 1999) The 2,664 horsepower rating for the engines operating at this station represents 14 percent of the 19,000 horsepower analyzed in that study. The proportionate levels of pollutants generated by the Ryan Gulch compressor would then be 213-222 $\mu g/m^3$ (one hour) and 65-87 $\mu g/m^3$ (eight hour) for CO and about 2 $\mu g/m^3$ (annual) for NO_2. These levels are all far below the National Ambient Air Quality Standards.

Environmental Consequences of the No Action Alternative: None

Mitigation: Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards.

CULTURAL RESOURCES

Affected Environment: The proposed pipelines and gas processing facility site were inventoried at the Class III (100% pedestrian) level (Conner 2004, Compliance Dated 9/13/2004). Seven cultural resources had previously been recorded in the project area: 5RB94, 5RB413, 5RB415, 5RB483, 5RB2401, 5RB2457, 5RB2684. Three new finds were identified in the inventory, a prehistoric open camp, 5RB4812, and two isolated finds, 5RB4855 and 5RB4856.

Environmental Consequences of the Proposed Action: Construction of the proposed pipelines and gas processing facility would impact two known cultural resources. The proposed spur pipeline from well 22-28 would pass through site 5RB2684, a historic brush fence, at one point. Approximately 60 feet of the 400 yard east-west portion of the fence would be removed by construction. The fence was field evaluated as not eligible for listing on the National Register of Historic Places. The main trunk of the gathering system would pass through the homestead site, 5RB483. The building on the site would not be affected because of a requirement that the pipeline be moved slightly closer to the county road, thus avoiding the structure.

Environmental Consequences of the No Action Alternative: None

Mitigation: 1. The operator will move the centerline of the trunk pipeline right-of-way to the north, closer to County Road 24, as directed by the Authorized Officer (AO), to avoid impacting site 5RB483. The applicant will be required to erect a visible construction barrier such as a temporary warning fence (orange plastic warning fence fabric) to insure the structure at this site is not impacted.

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the AO. Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary),
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed pipeline right-of-way (10.3 miles) was inventoried 50 feet on either side of the flagged centerline (approximately 160 acres) for the presence of any noxious or invasive weeds on August 12 and 13, 2004. The only noxious weed infestation encountered was a ½ acre Canada thistle patch located in Ryan Gulch in the NE¼NE¼ of Sec. 12, T2S, R98W. Occurrences of cheatgrass were observed on disturbed areas scattered along the length of the project.

Environmental Consequences of the Proposed Action: The disturbance associated with the proposed action could create a noxious weed problem by importing weed seed on vehicles and equipment or by having suitable conditions present (non-vegetated disturbed areas) for introduction of noxious weeds by other vectors. The proposed pipeline route goes through the Canada thistle patch noted above. Construction activities could spread this weed to other areas of the project by carrying seed or plant parts (rhizomes) on construction equipment.

In addition to noxious weeds, invasive non-native species such as cheatgrass could likely become a problem on disturbed areas. Cheatgrass occurrences are scattered near the proposed route for most of its length. Cheatgrass invasion is very likely if the disturbance is not reclaimed immediately following the disturbance.

Establishment of noxious or invasive weeds would create problems through seed production in proportion to the number of plants and the duration they are reproducing. Increased seed production of noxious or invasive plants could aggressively compete with or exclude desired vegetation during reclamation. The noxious or invasive species seed production could also encourage the spread of these unwanted plants into the adjacent native plant communities.

Environmental Consequences of the No Action Alternative: None

Mitigation: Eliminate any noxious plants before any seed production has occurred. Eradication should make use of materials and methods approved in advance by the Authorized Officer.

The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

The operator will be required to monitor disturbed areas for any Canada thistle that is spread or transported within the project area. Monitoring should occur until successful reclamation efforts have been achieved.

The operator will be required to attain sufficient cover of native reclamation species (similar to that of nearby undisturbed plant communities) by controlling invasive plant species by methods approved in advance by the Authorized Officer.

Other mitigation is included in the Vegetation section.

MIGRATORY BIRDS

Affected Environment: A large array of migratory birds nests during the months of May, June and July, within the sagebrush, greasewood, and pinyon/juniper communities found in the project area. Bird populations associated with these communities that have a high conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) are listed in the following table. There are no specialized or narrowly endemic species known to occupy the project area.

Birds of High Conservation Priority by Habitat Association

Sagebrush/Greasewood	Pinyon/juniper
Brewer's sparrow Green-tailed towhee	Pinyon jay, black-throated gray warbler, juniper titmouse, gray flycatcher, violet-green swallow

Environmental Consequences of the Proposed Action: Construction of the pipeline gathering system and gas processing plant would result in disturbance on about 60 acres of sagebrush, greasewood, and submature or regenerating pinyon/juniper habitat. The proposed pipeline is scheduled to be constructed during the winter of 2004/2005 prior to the arrival of migratory birds, and as such, the proposal would have no influence on nesting activities of migratory birds. Nesting of migratory birds may be disrupted and nests could be lost should construction activities be significantly delayed into the May through July period. In this case, and acknowledging that recent studies suggest that nest density tends to be reduced (i.e., 50%) in close proximity (i.e., within 300') of roads (85% of project extent), about 10-15 pairs of birds with higher conservation interest (virtually all associated with sagebrush communities) may be adversely affected. Although the proposed action would represent an incremental and longer-term reduction in the extent of the habitat associations described, implementation of the proposed action would have no measurable influence on the abundance or distribution of breeding migratory birds at any landscape scale.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a partial finding on Standard 4)

Affected Environment: The project area includes no federally-listed animal species and no habitat for such species. Other special status species that may be in the project area include the northern goshawk, a Colorado BLM Sensitive Species.

Use of pinyon/juniper woodlands by goshawk for nesting has been widely documented in the West, but their contribution to goshawk distribution, abundance, and population viability is of small consequence. Although a number of studies and surveys attribute little if any potential to pinyon/juniper woodlands for goshawk nesting, northern goshawk remain a relatively rare breeding species in this Resource Area. Summering birds are most commonly observed at higher elevations (>7100') where Douglas-fir occur as pure stands or as smaller inclusions among pinyon/juniper woodlands. However, over the last 30 years 3 nests have been found in mature mid-elevation pinyon/juniper woodlands as low as 6500'. Based on these few instances, the birds appear to site their nests in large contiguous tracts of mature woodlands deep (1000 or more feet) within stand interiors. One active nest was once located in a small residual stringer of trees in an extensive woodland chaining.

Biological consultants systematically searched suitable nest substrate (i.e., mature pinyon/juniper woodlands) within 300 feet of proposed pipelines and the gas processing plant in September 2004 and found no past or recent evidence of goshawk nesting activity.

Environmental Consequences of the Proposed Action: Woodlands affected by right-of-way clearing (approximately 14 acres) involve submature and encroaching woodlands that have no realistic potential of supporting goshawk nesting activity. There would be no effective loss of goshawk nesting habitat attributable to this project. There would be a very low probability of pipeline construction disrupting breeding goshawk in adjacent mature woodlands if construction were to occur during the nesting season.

Environmental Consequences of the No Action Alternative: None

Mitigation: In order to avoid the possible disturbance of a goshawk nest, a re-survey for evidence of raptor nesting should be conducted prior to pipeline construction if it occurs during the raptor nesting period (Apr. 1 – Aug. 15). If construction occurs during the remainder of the year, no additional surveys would be required.

Finding on the Public Land Health Standard for Threatened & Endangered Species: Although goshawks are peripheral breeding species in pinyon/juniper woodlands in Piceance Basin, the project area currently meets the standard for this special status species. Although potential habitat for goshawk nesting would not be adversely influenced by the proposed or no-action alternatives, stipulations attached to this action are designed to maintain habitat utility in

the event goshawk happen to nest in adjacent stands of mature woodland. These measures would ensure that the proposed action would remain consistent with continued meeting of the standards for special status animals.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a partial finding on Standard 4)

Affected Environment: A survey for special status plant species was conducted on May 10, 2004 for the line segment from well location 22-28 (located in the SE¼NW¼ Sec. 28, T2S R98W) to a tie-in point in Ryan Gulch (NW¼SE¼ Sec. 9, T2S, R98W). The remaining segments of the gathering system were surveyed on August 12 and 13, 2004. The entire proposed pipeline alignment was inventoried by a Westwater Engineering specialist with pedestrian transects covering an area 50 feet either side of the flagged centerline for all proposed pipeline routes. An area of approximately ten acres within the NE¼NE¼ of section 12, T2S R98W was surveyed for the proposed natural gas processing facility with parallel pedestrian transects inside the marked boundary for the site.

The entire gathering system occurs on soils derived from the Uinta Formation. This formation is not suitable habitat for any special status plants. No special status plant species were found

Environmental Consequences of the Proposed Action: No impact to any special status plant species would occur from construction and operation of the gathering system and gas plant as proposed.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The standard with regard to the special status species of plants is being met and will continue to be met. The project is not in or near suitable habitats for any special status plants.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed gathering lines for the 23-33, 22-28 and 23-7 well pads, the gas processing plant, and the pipeline from the compressor station to the tie-in with the Questar pipeline generally lie within the Ryan Gulch drainage. Well pad 22-28 and a small portion of its gathering line are within the Black Sulfur Creek drainage. Both Ryan Gulch and Black Sulfur Creek are tributary to Piceance Creek. Piceance Creek is a tributary of the White River which ultimately flows into the Colorado River. Water quality standards and guidance for drainages within the Lower Colorado River Basin are included in CDPHE-WQCC Regulation No. 37 (2004a).

Black Sulfur Creek is listed as the mainstems of Black Sulfur and Hunter Creeks from their sources to their confluences with Piceance Creek - Segment 20 of the White River. Black Sulfur Creek has use designations of aquatic life cold 1, recreation 2, and agriculture. The classification for White River Segment 20 is based upon the fact that the streams are ephemeral and/or intermittent. It is noted that there is an exception to Table Value Standards for iron (aquatic – chronic) in Segment 20. Ryan Gulch is included in all tributaries to Piceance Creek, including all wetlands, lakes and reservoirs from the source to the confluence with the White River, except for the specific listings in Segments 17 and 20 – Segment 16 of the White River. Segment 16 has use classifications of aquatic life warm 2, recreation 2, and agriculture.

The "Status of Water Quality in Colorado – 2004" (CDPHE, 2004b) was reviewed for information related to the project area drainages. White River Segment 20, including Black Sulfur Creek, was noted to have fully-supporting aquatic life cold 1, not assessed recreation 2, and fully-supporting agriculture designated uses. White River Segment 20 has a Colorado integrated reporting category of 2 which is described as: "Some uses have been assessed and all uses assessed are fully supporting the designated uses. Other uses have not been assessed." White River Segment 16 including Ryan Gulch was noted to have fully-supporting aquatic life warm 2, fully-supporting recreation 2, and fully-supporting agriculture designated uses. White River Segment 16 has a Colorado integrated reporting category of 1 which is described as: "Fully supporting for all uses. All uses have been assessed and all uses are fully supporting the designated uses."

Colorado Regulations Nos. 93 and 94 (CDPHE, 2004c and 2004d, respectively) were reviewed for information related to the project area drainages. Regulation No. 93 is the State's list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2004 list of segments needing development of TMDLs includes one segment within the White River -

segment 9b, White River tributaries North & South Forks to Piceance Creek, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development).

Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes five White River segments that are potentially impaired – 9, 12, 13a, 21, and 22. Neither segment 16 (Ryan Gulch) nor segment 20 (Black Sulfur Creek) is listed.

Ground Water: The project area is located within the Piceance Creek structural basin. Snowmelt and rain recharge the bedrock aquifers and replenish the ground water that migrates through the Uinta and Green River Formations (Tobin, 1987). Piceance Creek drainage basins upper and lower aquifers are separated by the semi-confining Mahogany Zone. Information presented in Topper et al. (2003) indicates the following approximate depths to potentiometric surfaces within hydrogeologic units: upper Piceance basin aquifer 600 feet, lower Piceance basin aquifer 700 feet, and Mesaverde aquifer 400 feet (based on a surface elevation of 7,400 feet). Water well data from the Colorado Division of Water Resources (Topper et al., 2003) indicated that in central Rio Blanco County water wells are not common in the basin. In the project area the total concentration of dissolved constituents in the upper and lower aquifers is generally lower than 1000 milligrams per liter. Primary hydrogeologic units within the Piceance Basin are listed in the following table.

Summary of Hydrogeologic Units

Hydrogeologic Unit	Thickness (ft)	Approx Avg Depth (ft)	Conductivity (ft/day)	Yield (gpm)	Transmissivity (ft^2/day)
Upper Piceance Basin aquifer	0 – 1,400	700	<0.2 to >1.6	1 to 900	610 to 770
Lower Piceance Basin aquifer	0 – 1,870	2,800	<0.1 to >1.2	1 to 1,000	260 to 380
Mesaverde aquifer	Averages 3,000	7,700	NL	NL	NL
Abbreviations: ft – feet, approx – approximate, avg – average, gpm – gallons per minute, and NL – not listed.					

Table information from Topper et al. (2003).

Environmental Consequences of the Proposed Action: Surface Water: The primary potential water quality impact would be from additional sediment resulting from the proposed construction. Removal of vegetative cover results in the potential for increased soil erosion near newly disturbed areas. Runoff-producing storm events could increase sediment loads in ephemeral channels. Depending on the soils affected, salt content in the sediment may also degrade water quality.

The magnitude of these impacts is dependent on the amount of surface disturbance and climatic conditions during the time the soils are exposed to the elements. Impacts would continue until mitigation has been implemented and proven to be successful. Such mitigation would include revegetating the pipeline route and the unused portion of the gas plant as soon as possible, placing gravel on areas that would not be revegetated, or placing check dams to control runoff.

Ground Water: No impact on groundwater resources is anticipated because, in general, the maximum depth of surface disturbance would be 36".

Environmental Consequences of the No Action Alternative: None.

Mitigation: Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the drilling is completed.

All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.

Vegetation or artificial stabilization of cut and fill slopes shall be provided for in the design process. Establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance shall be avoided.

Eliminate undesirable berms that retard normal surface runoff.

Finding on the Public Land Health Standard for water quality: Water quality in the stream segments within the project area meets the criteria established in the standard. With successful reclamation, the proposed and potential actions in the project area would not change this status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, riparian or wetland systems, prime and unique farmlands, wild and scenic rivers, Areas of Critical Environmental Concern or wilderness exist within the area analyzed. The Public Land Health Standard for wetland or riparian systems is not applicable to this action, since neither the proposed action nor the no-action alternative would have any influence on it. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The soil types in the project area occur from 6,100 to 7,600 feet in elevation. The average annual precipitation in the project area is 8 to 18 inches, the average annual temperature is 40 to 45 degrees F, and the average frost-free period is approximately 80 to 105 days. The proposed pipeline construction and compressor site development will occur within nine soil units inventoried by the Natural Resources Conservation Service (NRCS). Soil units, names, and characteristics are listed in the following table (SCS, 2004):

Summary of Project Area Soil Units

Soil Map Unit	Soil Unit Name	Slope (%)	Ecological Site	Effective Rooting Depth (in)	Runoff	Erosion Potential	Bedrock Depth (in)
6	Barcus channery loamy sand	2 – 8	Foothills Swale	≥ 60	Slow	Moderate	> 60
33	Forelle loam	3 – 8	Rolling Loam	≥ 60	Medium	Moderate	> 60
36	Glendive fine sandy loam	2 – 4	Foothills Swale	≥ 60	Slow	Slight	> 60
64	Piceance fine sandy loam	5 – 15	Rolling Loam	20 – 40	Slow to medium	Moderate to high	20 – 40
70	Redcreek-Rentsac complex	5 – 30	Pinyon/juniper Woodland	10 – 20	Medium	Moderate to high	10 – 20
73	Rentsac channery loam	5 – 50	Pinyon/juniper Woodland	10 – 20	Rapid	Moderate to very high	10 – 20
75	Rentsac-Piceance complex	2 – 30	Pinyon/juniper Woodland & Rolling Loam	10 – 40	Slow to medium	Slight to high	10 – 40
91	Torriorthents-Rock outcrop complex	15 – 90	Stony Foothills	10 – 20	Very Rapid	Very high	Not listed
104	Yamac loam	2 – 15	Rolling Loam	≥ 60	Medium	Slight to moderate	> 60

The majority of affected soil units have listed salinity values of less than 4 Mmhos per centimeter. Soil unit 36 has a maximum listed salinity values of less than or equal to 8 Mmhos per centimeter. Only unit 73 indicates a fragile soil with slope greater than 35 percent. Approximately 300 feet of the gathering from well 23-33 is indicated within soil unit 91 (Torriorthents rock outcrop complex). This segment of pipeline is west of County Road 24 and north of County Road 86. It is noted that during the project on-site meeting, it was decided that the portion of the pipeline on a north-facing hillside south of Ryan Gulch would be placed at the ground surface rather than buried.

Environmental Consequences of the Proposed Action: The type of construction activity in the proposed action removes surface cover and disturbs soils, thus potentially increasing soil erosion, and reducing soil health and productivity.

The table below shows the calculated disturbance by soil mapping unit for each of the elements of the proposed action. The total area over all soil units is approximately 85 acres. After successful reclamation, an estimated three to five acres would remain in an unvegetated state for the life of the project (30-40 years) or longer.

Facility	Soil Mapping Unit									Total Area
	6	33	36	64	70	73	75	91	104	
Pipeline from 23-33 Well Pad to 8-inch Pipeline										
Feet			1150			3800	3400	350	2500	11,200
Acres			1.6			5.2	4.7	0.5	3.4	15.4
Pipeline from 22-28 Well Pad to 8-inch Pipeline										
Feet	350	600	750	3300	3500	9300	1100			18,900
Acres	0.5	0.8	1.0	4.5	4.8	12.9	1.6			26.1
Pipeline from 23-7 Well Pad to Compressor Facility										
Feet	1200					3700				4900
Acres	1.6					5.1				6.7
Pipeline from Tie-In with 23-33 Gathering Line to Compressor										
Feet	7700		11,100							18,800
Acres	11.0		15.7							26.7
Questar Tie-in Line and Access Road to Gas Plant										
Feet			700							700
Acres			1.0							1.0
Compressor Facility										
Acres			10.0							10.0
Total Area										
Acres	12.7	0.8	28.9	4.5	4.8	23.1	6.2	0.5	3.4	85.9

Environmental Consequences of the No Action Alternative: None.

Mitigation: Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the re-establishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

Water bars or dikes shall be constructed on all of the right-of-way, and across the full width of the disturbed area, as directed by the Authorized Officer.

Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be re-established to increase infiltration and provide additional protection from erosion.

When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

The 4" pipeline from well 22-28 will be installed on the surface as it travels from the ridge line down into Ryan Gulch near the intersection of CR 24 and CR 86 (T2S, R98W, Sec. 9). The line may be buried after it leaves the pinyon/juniper on the sideslope and enters the Ryan Gulch bottom.

Finding on the Public Land Health Standard for upland soils: Soils within the project area meet the criteria established in the standard for upland soils. With successful reclamation, the proposed action would not change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The pipeline would cross several different vegetation associations. The three spur lines to wells 23-7, 23-33 and 22-28 cross a mix of pinyon/juniper woodlands and Wyoming sagebrush parks.

- The spur to well 23-33 crosses about a mile of Wyoming sagebrush with a native grass understory and a little over a mile of a sparse pinyon/juniper woodland with an understory of Wyoming sagebrush and grass.
- The spur to well 22-28 crosses a little over two miles of Wyoming sagebrush with a native grass understory, about 1 mile of sparse pinyon/juniper woodland with an understory of Wyoming sagebrush and grass and a little over ¼ mile of dense pinyon/juniper woodland just before dropping into Ryan Gulch.
- The spur to well 23-7 crosses about ¼ mile of sparse pinyon/juniper woodland with an understory of Wyoming sagebrush and grass, about ¼ mile of a grass/forb grassland and a little less than ½ mile of Basin big sagebrush with a grass understory.
- The proposed compressor site is in Basin big sagebrush community with a grass understory.
- The main trunk line is in the alluvial bottom of Ryan Gulch which is mostly a Basin big sagebrush community with a grass understory.

Environmental Consequences of the Proposed Action: Construction of the pipeline would remove vegetation from about 86 acres as follows:

- Spur to well 23-33 15.4 acres
- Spur to well 22-28 26.1 acres
- Spur to well 23-7 6.7 acres
- Main line in Ryan Gulch and Piceance Creek 26.7 acres
- Natural gas plant and compressor site 11.0 acres.

The acreages of each plant community impacted are estimated as follows:

- Wyoming sagebrush with a native grass understory 33 acres
- Pinyon/juniper Woodland with Wyoming sage/grass understory 19 acres
- Basin Sagebrush/Greasewood bottom land 32 acres
- Native grass/forb grassland 2 acres

With the exception of about three acres at the compressor site, this disturbance would remain non-vegetated for only a short period of time if successfully reclaimed. It is expected that the cover and production of herbaceous species on the sagebrush and pinyon/juniper communities would exceed current levels within three years following disturbance for most of the project.

The longer the disturbance remains non-vegetated, the greater the chance for invasion of weedy plants onto the site. Some of those weedy species can create problems in future reclamation efforts and some may be totally non-desirable (refer to the discussion of noxious and invasive non-native species above).

Environmental Consequences of the No Action Alternative: None

Mitigation: All disturbed areas for the pipeline would be reclaimed within the first growing season or prior to the first full growing season following disturbance with a seed mix specified by the Authorized Officer. Successful revegetation should be achieved within three years. The operator will be required to monitor the project site(s) for a minimum of three years post-construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Most of the public land plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation, the proposed action would not change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There is no aquatic wildlife within or potentially affected by the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Because there is no aquatic wildlife within the project area, the standard is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: Pipelines from the three wells and the compressor site are all located in the bottom third of Ryan Gulch and its associated side ridges or drainages. Ryan Gulch runs from SW to NE and drains into Piceance Creek on the east. There is no free-flowing water in the portion of Ryan Gulch affected by this project. The bottom of the gulch is covered with big sagebrush and greasewood while the adjacent ridge tops are covered with pinyon/juniper and sagebrush with an occasional serviceberry. Old deer and elk sign is evident along Ryan Gulch in all habitat types; fresh elk sign was observed on September 3, 2004 in the bottom of Ryan Gulch. The ridge along which the pipeline from well 22-28 to the bottom of Ryan Gulch would travel provides a seasonal migration corridor for deer and elk. All of lower Ryan Gulch and its tributaries are mapped as normal winter range for deer; the bottom five miles of Ryan Gulch and Piceance Creek is severe winter range for deer.

The gathering system route and the site of the gas processing plant were surveyed for potential raptor nesting habitat and evidence of raptor nest activity in September 2004. Large rock outcrops on the north side of Ryan Gulch provide suitable nesting sites for red-tailed hawks, golden eagles and prairie falcons, but no nests were observed. Similarly, and with the exception of a previously located Cooper's hawk nest that was successful in 2004 and is located adjacent to the 23-7 location, no further evidence of nesting activity by woodland raptors (e.g., sharp-shinned and Cooper's hawk) was found in pinyon/juniper woodlands within ¼ mile of proposed pipeline and compressor station sites.

Nongame bird abundance and composition associated with the project area's woodland and shrubland habitats are considered representative and complete with no obvious deficiencies in composition. Small mammal populations and distribution are poorly documented; however, the species potentially occurring on these sites are widely distributed throughout the State and the Great Basin or Rocky Mountain regions. All of these upland species display broad ecological tolerance and are documented from habitats ranging from foothill to alpine sites. No narrowly distributed or highly specialized species or subspecific populations are known to occur in Piceance Basin.

Environmental Consequences of the Proposed Action: Construction of the compressor station site and the three pipelines would result in the modification of about 86 acres of habitat. The primary alteration in habitat would involve the longer term (5-25 years) loss of woody forage along the cleared right-of-way (primarily Wyoming big sagebrush and rubber rabbitbrush), although the utility of these forage supplies is variously compromised by their roadside position (particularly County Roads 24 and 85). Alterations in the availability of herbaceous forages would be offset by reclamation within one to two years.

Only a portion of the habitat would be lost long term as revegetation of the pipelines would take place within several years. However, habitat lost through construction of the compressor station and maintaining this area as non-vegetated until production ceases would be a long-term loss of three to five acres. This temporary and dispersed reduction in woody forage supplies is considered discountable in the context of local availability.

There would be an increase in disturbance of wildlife during pipeline and compressor station construction within a ¼ mile corridor. Construction of approximately 10 miles of pipeline would disturb about 1,650 acres and construction of the compressor station would disturb about 120 acres for a total of 1,770 acres. Once the pipelines are built and revegetated, the impact of disturbance should cease.

The compressor station vicinity and pipeline construction associated with the 23-7 location are largely encompassed by deer severe winter range (approximately 5000' of pipeline construction). The compressor station and approximately half the pipeline are situated in the heavily traveled Ryan Gulch corridor. Bottomlands along the paved Ryan Gulch road are strongly influenced by persistent vehicle travel, but continue to support consistent use by deer during the early spring months between April 1 and May 15. The behavioral effects of oil and gas activity on deer during the late winter and early spring period (i.e., avoidance and disuse of available forage, elevated energetic drain) would be most pronounced on severe winter range. It is recommended

that, regardless of prevailing winter weather conditions, pipeline construction associated with the 23-7 location be scheduled to avoid the period between January 1 and May 15 and that pipeline and compressor station construction in Ryan Gulch be prohibited from April 1 through May 15.

Pipeline installation activities associated with the 23-7 location would occur in close proximity to a Cooper's hawk nest and, if synchronous with subsequent nesting activity, would have a high likelihood of failing an ongoing nest attempt. Pipeline installation and reclamation activities in that area would be subject to RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from April 1 through August 15 or until fledging and dispersal of young. In addition, the pipeline should be routed on the south or west side of the access road (i.e., side more distant from the raptor nest) and efforts should be made to minimize the cleared right-of-way width.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Pipeline installation and reclamation activities would be subject to RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from April 1 through August 15 or until fledging and dispersal of young in the following legal subdivisions: Township 2 South, Range 97 West, section 7: Lots 15 and 16. This stipulation can be modified or excepted based on site-specific information that indicates the nest would remain unattended by May 15 of the project year. In an effort to maintain nest site character for subsequent nest use, within 200 yards of the west edge of the 23-7 pad, the pipeline should be routed on the south or west side of the access road (i.e., side more distant from the raptor nest) and efforts should be made to minimize the cleared right-of-way width.

Pipeline construction associated with the 23-7 location would be scheduled to avoid the period between January 1 and May 15 to avoid disturbance of deer severe winter range. This stipulation is applicable to the following legal subdivisions: T2S R97W section 7: Lots 8, 9, 16.

Pipeline and compressor station construction in Ryan Gulch would be prohibited from April 1 through May 15 to avoid disturbance of deer severe winter range. This stipulation is applicable to the following legal subdivisions:

T2S R97W	Section 6: Lot 20
T2S R98W	Section 1: Lots 35, 36
	Section 12: Lots 11, 12, 14

Once the pipeline construction is complete from well 23-7 to the bottom of Ryan Gulch, it is recommended that the right-of-way would be closed to motorized vehicles except pipeline maintenance vehicles. (See Access and Transportation mitigation.)

In order to avoid the possible disturbance of raptor nests, a re-survey for evidence of raptor nesting should be conducted prior to pipeline construction if it occurs during the raptor nesting period (Feb. 1 – Aug. 15). If construction occurs during the remainder of the year, no additional surveys would be required.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Threatened, Endangered and Sensitive Animal species): The project areas presently meet the public land health standards for terrestrial animal communities. The proposed action, as conditioned, would not jeopardize the viability of any animal population. It would have negligible consequence on terrestrial habitat condition, utility, and/or function, and would have no discernible effect on animal abundance or distribution at any landscape scale. Lands affected by the no-action or proposed action, as conditioned, would continue to meet the land health standard for big game, raptor, and nongame animals.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those checked in the last column will be addressed further in this EA.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management		X	
Forest Management		X	
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise			X
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics			X
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: Much of the proposed action would occur along Rio Blanco County roads. The 8" pipeline up Ryan Gulch and the natural gas processing plant and compressor would be located adjacent to CR 24; the 4" pipeline originating at well 23-33 would lie to the west of CR 24; the 4" pipeline originating at well 22-28 would lie to the southwest of CR 86 for about the first ¾ mile and then would proceed along an unnumbered BLM road to the north. The 4" pipeline originating at well 23-7 would not be located on or near a county road. It would travel down a spur of BLM Road 1019 for somewhat less than a mile to the tie-in point at the gas processing plant. This road spur has been severely compromised by the passage of storm water and it has become an ephemeral waterway for part of its length. At its northern end, near the site of the proposed gas processing plant, it drops into a dry wash and periodically contributes water to the wash, increasing the cut at the point where it enters the wash.

The amount of travel along the county roads is usually low, limited to oil and gas personnel, local ranchers and residents and the occasional recreationist. Travel along the BLM roads is even more infrequent.

Motorized vehicle travel on public lands within the area of the proposed action is limited to existing roads from October 1 to April 30 each year. Cross-country motorized vehicle travel is allowed from May 1 to September 30 as long as no resource damage occurs as a result.

Environmental Consequences of the Proposed Action: Construction of the proposed facilities would contribute to traffic along the county roads for a period of sixty days or more. At those points where the pipeline route intersects CR 24 and is to be bored under the road, at well site 23-7, traffic should not be impeded by the crossing. At those points where the pipeline is to be trenched across county roads, traffic may be impeded and would be managed according to the traffic control conditions of the applicant's county permit. The impact would be low since traffic levels are low. The condition of the roadway should be returned to its previous condition by the applicant.

Where the pipeline route follows a BLM road, the applicant would be required to install the pipeline within the roadway so as to minimize disturbance to vegetation. In the case of the unnumbered BLM road from CR 86 in T2S, R98W, Sec. 9, to the intersection with CR 85 in Sec. 9, the roadbed is to be reconstituted as it was from the point of origin at CR 86 for about 1.5 miles to the pasture fence in Sec. 16, placing water bars as directed in the stipulations. From that point north, the right-of-way should be reclaimed without regard to the pre-existing two-track, recontouring, placing water bars and reseeding the entire area of disturbance. In the case of the spur of BLM Road 1019 that proceeds from well 23-7 to the gas processing plant, this right-of-way should also be reclaimed without regard to the pre-existing two-track, recontouring, placing water bars and reseeding the entire area of disturbance. This section of road is on a slope too steep for road construction and maintenance and has become a source of erosion. The road is redundant in that there are multiple alternatives for accessing the ridge between Ryan Gulch and Black Sulphur Creek.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Where the pipeline route follows a BLM road, the applicant will install the pipeline within the roadway so as to minimize disturbance to vegetation. The roadbed is to be reconstructed as part of the reclamation, with placement of waterbars as needed. There are two exceptions to this general rule:

- On the unnumbered BLM road along the ridge from CR 86 to Ryan Gulch, the portion north of the pasture fence in T2S, R98W, Sec. 16 should be reclaimed without regard to the pre-existing two-track, recontouring, placing water bars and reseeding the entire area of disturbance.
- The spur of BLM Road 1019 that proceeds from well 23-7 to the gas processing plant should be rehabilitated as to allow full size vehicle traffic with regard to the pre-existing two-track following pipeline installation. BLM road 1019 will remain open to public use.

NOISE

Affected Environment: County Road 24 is the primary source of man-made noise within the project area. Traffic up and down the road generates some noise throughout the day but very little noise during the night. Well drilling activity by the applicant and by others generates noise for periods of up to six weeks at a time. Those people subject to noise generated in the project area are, for the most part, employees of the oil and gas companies, ranchers and hunters, in season. The only residence in the vicinity of the project area is about two miles from the compressor station.

Environmental Consequences of the Proposed Action: Construction of the pipeline gathering system and the gas plant would produce noise associated with increased construction traffic and the operation of heavy equipment for a period of up to two months, at which time the impact would cease. However, when the compressor at the gas plant begins operation, it would generate noise round the clock for the life of the facility (40 or more years). The Colorado Oil and Gas Commission (COGCC) has established a noise limit of 55 decibels (dBA) as the limit for oil and gas facilities in residential areas. (This can be compared to average highway noise of 60 dBA at 100 feet.) For the proposed three-engine compressor station, with the engines located in a building, the 55 dBA level would be produced at about 200 feet. The night-time COGCC limit (50 dBA) would be produced at about 300 feet. Local wind and terrain effects could cause that distance to vary considerably in different parts of the project area and at different times. (USDI BLM, 2004)

Environmental Consequences of the No Action Alternative: None.

Mitigation: At the discretion of the Authorized Officer, the operator will take measures to reduce noise produced by the compressor station to levels as low as the noise limits described by COGCC for residential areas.

PALEONTOLOGY

Affected Environment: The proposed gathering system and gas processing plant are located in an area mapped as the Uinta Formation (Tweto 1979). BLM has classified the Uinta as a Category I formation, meaning that it is a known producer of scientifically significant fossils.

Environmental Consequences of the Proposed Action: Since the proposed action would occur within the Uinta formation, there is potential for impacting fossil resources if it is necessary to excavate into the underlying bedrock formation to construct the pipeline or gas plant facilities.

Environmental Consequences of the No Action Alternative: None

Mitigation: A paleontological monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline or construct the gas plant.

Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the Authorized Officer.

RANGELAND MANAGEMENT

Affected Environment: A majority of the project that is on public land is within the Square S Grazing Allotment. The allotment has two grazing permit holders, Mantle Ranches and Boone Vaughn. Both permit holders run cattle on the allotment from May through January. The area of the proposed action is used primarily during May and early June on alternate years with some late fall use other years. The project lies within three pastures of the allotment which are used in a deferred rotation grazing system.

About ¼ mile of the pipeline from well 22-28 lies within the Black Sulphur Grazing Allotment which has the same permit holders as the Square S allotment. Cattle run on this allotment in spring and fall.

About the last mile of the proposed pipeline from well 22-28 before it drops into Ryan Gulch is on the Reagles Grazing Allotment. The permit holder for this allotment, Wenschhof Cattle Co., runs cattle on the allotment from May through December. The area of the proposal is used in May and early June on alternating years.

Rangeland Improvements: The proposed pipeline crosses several fences that are either pasture fences within the Square S allotment or are boundary fences between grazing allotments or boundary fences between private and public land.

The proposed pipeline route from well 22-28 would impact a livestock gravity flow waterline which runs along the allotment boundary fence between the Square S and Reagles allotments. The proposed pipeline is staked within 20 feet of the waterline at three locations, in the SE¼SW¼ of section 16, the SE¼NE¼ and the NE¼SW¼ of section 20, all in T2S, R98W. In terms of the surveyed stations along this section of the proposed pipeline, the route is near or crosses the waterline:

- At station 64+50.45, a watering trough and waterline are nearby.
- Between stations 64+50.45 and 72+32.16, the route is within 20 feet of the waterline.
- At station 72+32.16, the route crosses the waterline and an allotment boundary fence.
- Between stations 106+00 and 110+08.78, the route is within 20 feet of the waterline and an allotment boundary fence.
- At station 110-08.78, the route crosses a pasture fence.

- Between stations 136+00 and 142+00, the route is within 20 feet of the waterline and an allotment boundary fence.

A windmill and stock tank and three water-gap fences are located near the proposed route in the SW¼SE¼ of section 9, T2S, R98W. The windmill provides water to two pastures of the Square S allotment and one pasture of the Reagles allotment. The water-gap fences all converge at the windmill with gates to control use of the water by livestock.

Environmental Consequences of the Proposed Action: The actions proposed could result in a public land forage loss to livestock of about 10 animal unit months (AUM). An AUM equates to the forage needs of a mature cow with calf for one month. Most of this loss would be only short term until successful reclamation of disturbed areas had occurred. This short-term forage loss would occur on the three grazing allotments affected as follows:

- Black Sulfur Allotment 0.5 AUMs
- Reagles Allotment 1.5 AUMs
- Square S Allotment 8.0 AUMs

The short-term forage loss is not expected to result in any need for changes in livestock numbers or grazing periods on the three allotments affected. All three allotments have the capacity to absorb this level of forage loss for two to three years. Reclamation of disturbed areas would likely offset the short-term forage loss on the three allotments within two to three years through increased herbaceous production above current production levels.

The only long-term forage loss for livestock expected from this action, provided reclamation efforts are successful, is the area encompassed by the proposed compressor site. About three acres would be taken out of production for the life of the project which would result in less the 0.5 AUM forage loss on the Square S allotment. This minute loss can easily be absorbed within this allotment.

This proposed action could interfere with proper functioning of the range improvements near the proposal. The fences and water sources in this area are necessary for control of cattle to achieve grazing objectives on three grazing allotments and to keep cattle from straying into the wrong grazing use area. Damage to fences or gates left open interfere with control of cattle and ultimately with proper utilization of the rangeland resource. Damage to watering facilities could affect water availability and distribution of livestock, resulting in increased grazing pressure on areas that have water available for livestock. These impacts would be greatest during the construction phases, especially if construction coincides with livestock use of the area in spring or late fall.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Any fence crossing and gates encountered on existing roads on public land that are utilized in construction of the pipeline would require placement of a temporary cattleguard constructed to BLM specifications to keep cattle from straying into other areas.

Construction of the line would involve at least nine fence crossings that are on or border public land. Proper fence bracing and construction (to BLM standards) must be in place when going through a fence so as to maintain proper wire tensions. The effectiveness (control of cattle) of these fences at these crossing points must be maintained at all times during construction and operation of the pipeline.

The waterline and watering troughs located along the proposed route in the SE¼SW¼ of section 16, the SE¼NE¼ and the NE¼SW¼ of section 20, all in T2S, R98W will be avoided if possible during construction or replaced in functioning condition if avoidance is not practical. If livestock are present during construction and the waterline and watering troughs are in use, the operator will be required to haul water for livestock for as long as the waterline is not functional.

The windmill and stock tank located near the proposed route in the SW¼SE¼ of section 9, T2S, R98W will be avoided by all construction activities. The water-gap fences which converge at the windmill and stock tank will be maintained in operational condition at all times during construction.

REALTY AUTHORIZATIONS

Affected Environment: An estimated 7.5 miles of the proposed 10.3 mile gathering system (39,790 of 54,400 feet) would be located on federal lands administered by BLM. The entire ten-acre gas processing facility would also be located on federal lands.

Environmental Consequences of the Proposed Action: Rights-of-way would be required for both the pipeline gathering system and the gas processing facility. The application for both actions has been serialized as COC67991.

Environmental Consequences of the No Action Alternative: None.

Mitigation: A "Notice to Proceed" stipulation will be included in the ROW grant for the pipeline gathering system indicating that construction of any of the pipelines will only be permitted to begin when the well it services is producing.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use. The most intense recreation activity in the area is likely to be hunting during the fall seasons.

The roadways in the lower portions of the Ryan Gulch and Black Sulphur Creek drainages most closely resemble the Recreation Opportunity Spectrum (ROS) class of Roaded Natural (RN). RN settings are characterized by a generally natural environment with evidence of rural

residences and agricultural land uses. Resource manipulations are noticeable and are harmonious with the natural environment but substantial modifications may be encountered. The areas provide about equal opportunities for interaction with other visitors and to experience isolation from the sites and sounds of man. The ridges along these drainages most closely resemble the Semi-Primitive Motorized (SPM) class. A natural appearing environment with few administrative controls typically characterizes an SPM recreation setting; there is low interaction between users but evidence of other users may be present. An SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment with challenge and risk.

Environmental Consequences of the Proposed Action: The public would lose about ten acres of dispersed recreation potential while the gas processing plant occupies its site (40 years or more). The public would most likely not recreate in the vicinity of the pipeline route during construction. This would especially be the case if construction were to occur during the hunting season (September through November), because it would disrupt the experience sought by those recreationists and would cause game to disperse to other areas, reducing the chance for a successful hunt.

After construction, the pipeline would not materially conflict with the either the SPM or RN settings or the experience to be expected in each setting. Pipeline maintenance activities would be infrequent and would not measurably increase the likelihood of interaction with others while recreating in the area. The facilities at the gas plant in Ryan Gulch are in concert with the RN setting which anticipates substantial modification of the natural environment.

Environmental Consequences of the No Action Alternative: None of the loss of dispersed recreation potential would occur and there would be no impact on recreationists.

Mitigation: None.

SOCIO-ECONOMICS

Affected Environment: The proposed action would be developed in Rio Blanco County but construction and drilling resources would also be drawn from Garfield County, Mesa County and eastern Utah. Rio Blanco County had a 2002 population of 6,063, almost unchanged from the 1990 level of 6,051. The major communities in the county are Meeker (2,272 population in 2002) and Rangeley (2,108). The county underwent a substantial economic and demographic growth in the late 1970's and early 1980's as major energy companies attempted to develop oil shale as a national energy fuel source. After a decline in jobs and population from the boom levels, the number of jobs and people in the county has remained static. Currently, the government sector makes up almost a third of all jobs in the county. The traditional farming and ranching sector has been supplemented in the last few years by a growing number of jobs in the oil and gas extraction industry as drilling and related processing activity has expanded. Many of the resources for development of the oil and gas resource come out of Garfield County, Mesa County, or Uintah County in Utah and locate in Rio Blanco County on only a temporary basis.

In addition to oil and gas exploration and development, the other major economic activity that occurs in the project area is livestock grazing.

Environmental Consequences of the Proposed Action: The employment required for construction of the pipeline and gas processing plant may be as many as 40 workers. These employees would not represent new employment for the area but would be workers already available in the area or from nearby communities in western Colorado or eastern Utah. Motels, restaurants, grocery stores, gas stations, vehicle and equipment repair shops may all experience some additional activity. The facilities developed by the proposed action would expand the local property tax base. This net effect of these impacts would be considered beneficial but low.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: Public lands administered by BLM in the project area have received VRM Class III designation. The management goal for this class is to partially retain the existing character of the landscape. The change brought about by activities on lands with VRM III designation may be evident. The visual contrast may be moderate but should not dominate the natural landscape character. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The landscape in the project area has already undergone some transformation as several major pipeline routes transect the area. Public access to the area of the proposed actions is unrestricted and the viewing public includes those who use Rio Blanco County Roads 5 (the Piceance Creek Road), 24, 85 and 86.

Environmental Consequences of the Proposed Action: The construction of the pipelines from three well pads and the construction of a ten acre gas processing and compressor facility would alter the landscape character. Removal of vegetation and recontouring of the natural surface introduce linear features into the landscape, offering contrasting soil and vegetation colors and patterns that had not previously been there. This impact would lessen in the long-term as exposed areas were reclaimed and bare soil was not so extensively evident. At the point where the pipeline would be most visible - where it drops down a ridge near the intersection of CR 24 and CR 86 (T2S, R98W, Sec. 9) - the impact would be greatly reduced by installation of the pipeline on the surface rather than burying it. Removal of the pinyon, juniper and other vegetation on the slope facing the road would be a scar that would be prominent until the pinyon/juniper community had re-established.

The location of the processing plant and compressor immediately adjacent to CR 24 would generate a strong effect in the foreground that would remain as long as the plant was located there. Above-ground natural gas production facilities such as process heaters, the amine sweetening unit, the dehydration unit and the compression station would introduce man-made

industrial facilities that would draw attention due to their size, color and shape. The use of natural paint tones would reduce the visual impact of the facilities.

Viewed from a distance, the changes in the landscape, with mitigation, would appear to be moderate and would not dominate the natural character of the landscape, meeting the standards of the VRM III classification.

Environmental Consequences of the No Action Alternative: None

Mitigation: All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

Disturbed areas shall be restored as nearly as possible to their original contour.

The 4" pipeline from well 22-28 will be installed on the surface as it travels from the ridge line down into Ryan Gulch near the intersection of CR 24 and CR 86 (T2S, R98W, Sec. 9). The line may be buried after it leaves the pinyon/juniper on the sideslope and enters the Ryan Gulch bottom. (See Soils mitigation.)

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area PRMP/FEIS. Current development, including the actions proposed in the Williams Ryan Gulch gathering system and gas processing plant project, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

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USDI Bureau of Land Management, Colorado. 2004. Environmental Assessment of the Figure Four Natural Gas Development Project. Meeker, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Project Team		
Name	**Title**	**Area of Responsibility**
BLM Oversight		
Penny Brown	Realty Specialist	Project Lead; Realty Authorizations
Keith Whitaker	Natural Resource Specialist	Visual Resources
Ed Hollowed	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife; Wetlands and Riparian Zones
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species
Chris Ham	Outdoor Recreation Planner	Recreation; Wilderness; Access and Transportation
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation; Invasive, Non-Native Species; Rangeland Management
Michael Selle	Archeologist	Cultural and Paleontological Resources
Caroline Hollowed	Hydrologist	Air Quality; Water Quality, Surface and Ground; Hydrology and Water Rights; and Soils
Paul Daggett	Mining Engineer	Geology and Minerals
Ken Holsinger	Natural Resource Specialist	Fire Management
Bob Fowler	Forester	Forest Management
Valerie Dobrich	Natural Resource Specialist	Wild Horses
Marty O'Mara	Petroleum Engineer	Wastes, Hazardous or Solid
WestWater Engineering (Third Party Contractor)		
Dan McWilliams	Senior Engineer	Air Quality and Soils
Steve Moore	Environmental Scientist	Areas of Critical Environmental Concern; Cultural Resources; Paleontological Resources; Wastes, Hazardous or Solid; Access and Transportation; Wilderness; Realty Authorizations; Recreation; and Visual Resources
Rusty Roberts	Range Conservationist	Threatened and Endangered Plant Species; Invasive, Non-Native Species; Wetlands and Riparian Zones; Vegetation; Fire Management; Rangeland Management; and Wild Horses
John Gray	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife, Terrestrial and Aquatic
Kim Kaal	Senior Geologist	Water Quality, Surface and Ground; Hydrology and Water Rights; Geology and Minerals
Rich Alward	Environmental Scientist	Document Preparation

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2004-180-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. The approved mitigation measures (attached to the right-of-way grant as stipulations) result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action for right-of-way COC67991.

WestWater Engineering, an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

DECISION/RATIONALE: It is my decision to approve the right-of-way grant for a pipeline gathering system and a gas processing plant and compressor in Ryan Gulch. The proposed action is in concert with the objectives of the White River ROD/RMP in that it would allow development of federal oil and gas resources and would make public lands available for the siting of public and private facilities in a manner that provides for reasonable protection of other resource values. Protection for other resource values will be assured by implementation of the mitigation measures described below and attached to the right-of-way grant as stipulations.

MITIGATION MEASURES:

1. Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards.

2. The operator will move the centerline of the trunk pipeline right-of-way to the north, closer to County Road 24, as directed by the Authorized Officer (AO), to avoid impacting site 5RB483. The applicant will be required to erect a visible construction barrier such as a temporary warning fence (orange plastic warning fence fabric) to insure the structure at this site is not impacted.

3. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the AO. Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,

- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary),

- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

4. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

5. The operator will eliminate any noxious or invasive plants before any seed production has occurred on the disturbed areas created by this project. Eradication should make use of materials and methods (Pesticide Use Proposal) approved in advance by the AO. Several control efforts may be necessary before sufficient control is achieved. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator.

6. The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

7. The operator will be required to monitor disturbed areas for any Canada thistle that is spread or transported within the project area. Monitoring should occur until successful reclamation efforts have been achieved.

8. The operator will be required to attain sufficient cover of native reclamation species (similar to that of nearby undisturbed plant communities) by controlling invasive plant species by methods approved in advance by the AO.

9. In order to avoid the possible disturbance of a nest or nests, a re-survey for evidence of raptor nesting should be conducted prior to pipeline construction if it occurs during the raptor nesting period (April 1 – Aug. 15). If construction occurs during the remainder of the year, no additional surveys would be required.

10. The operator shall collect and properly dispose of any solid wastes generated by this project.

11. Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater and hydrostatic test water from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

12. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation use once construction is completed. (RMP 4)

13. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years. (RMP 6)

14. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO. (RMP 8)

15. Provide vegetation or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance. (RMP 24)

16. Eliminate undesirable berms that retard normal surface runoff. (RMP 35)

17. Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the re-establishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

18. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, according to the following standard or as directed by the AO. (RMP 96)

Grade	Spacing
2 %	Every 200 feet
2-4 %	Every 100 feet
4-5 %	Every 75 feet
5+ %	Every 50 feet

19. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be re-established to increase infiltration and provide additional protection from erosion. (RMP 97)

20. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff. (RMP 98)

21. The 4" pipeline from well 22-28 will be installed on the surface as it travels from the ridge line down into Ryan Gulch near the intersection of CR 24 and CR 86 (T2S, R98W, Sec. 9). The

line may be buried after it leaves the pinyon/juniper on the sideslope and enters the Ryan Gulch bottom.

22. All disturbed areas for the pipeline and gas plant, with the exception of those permanent working surfaces at the gas plant, will be reclaimed within the first growing season or prior to the first full growing season following disturbance with the specified following native seed mixes (White River ROD/RMP Appendix B, Conditions of Approval).

Native Mix #2 in pounds of pure live seed per acre (lbs/pls/ac*) will be used on all disturbed areas that are not in the bottom of Ryan Gulch:

- Western wheatgrass (Rosanna) 2 lbs/pls/ac
- Indian ricegrass (Rimrock) 1 lbs/pls/ac
- Bluebunch wheatgrass (Whitmar) 2 lbs/pls/ac
- Thickspike wheatgrass (Critana) 2 lbs/pls/ac
- Needle and thread 0.5 lbs/pls/ac
- Globemallow or Utah sweetvetch 1 lbs/pls/ac

Native Mix #5 in pounds of pure live seed per acre (lbs/pls/ac*) will be used on all disturbed areas that are in the bottom of Ryan Gulch:

- Basin Wildrye (Magnar) 2 lbs/pls/ac
- Western wheatgrass (Rosanna, Arriba) 3 lbs/pls/ac
- Bluebunch wheatgrass (Secar) 1 lbs/pls/ac
- Thickspike wheatgrass (Critana) 2 lbs/pls/ac
- Fourwing saltbush (Wytana) 1 lbs/pls/ac

*Note: Seeding rates given are for drill seeding. The seeding rates will be double for broadcast/harrow seeding.

23. Pipeline installation and reclamation activities would be subject to RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from April 1 through August 15 or until fledging and dispersal of young, in the following legal subdivisions: Township 2 South, Range 97 West, section 7: Lots 15 and 16. This stipulation can be modified or excepted based on site-specific information that indicates the nest would remain unattended by May 15 of the project year. In an effort to maintain nest site character for subsequent nest use, within 200 yards of the west edge of the 23-7 pad, the pipeline should be routed on the south or west side of the access road (i.e., side more distant from the raptor nest) and efforts should be made to minimize the cleared right-of-way width.

24. Pipeline construction associated with the 23-7 location would be scheduled to avoid the period between January 1 and May 15 to avoid disturbance of deer severe winter range. This stipulation is applicable to the following legal subdivisions: T2S R97W section 7: Lots 8, 9, 16.

25. Pipeline and compressor station construction in Ryan Gulch would be prohibited from April 1 through May 15 to avoid disturbance of deer severe winter range. This stipulation is applicable to the following legal subdivisions:

T2S R97W, section 6: Lot 20

T2S R98W, section 1: Lots 35, 36
section 12: Lots 11, 12, 14

26. Once the pipeline construction is complete from well 23-7 to the bottom of Ryan Gulch, it is recommended that the right-of-way would be closed to motorized vehicles except pipeline maintenance vehicles.

27. In order to avoid the possible disturbance of raptor nests, a re-survey for evidence of raptor nesting should be conducted prior to pipeline construction if it occurs during the raptor nesting period (Feb. 1 – Aug. 15). If construction occurs during the remainder of the year, no additional surveys would be required.

28. Where the pipeline route follows a BLM road, the applicant will install the pipeline within the roadway so as to minimize disturbance to vegetation. The roadbed is to be reconstructed as part of the reclamation, with placement of waterbars as needed. There are two exceptions to this general rule:

- On the unnumbered BLM road along the ridge from CR 86 to Ryan Gulch, the portion north of the pasture fence in T2S, R98W, Sec. 16, should be reclaimed without regard to the pre-existing two-track, recontouring, placing water bars and reseeding the entire area of disturbance.

- The spur of BLM Road 1019 that proceeds from well 23-7 to the gas processing plant should be rehabilitated as to allow full size vehicle traffic with regard to the pre-existing two-track following pipeline installation. BLM road 1019 will remain open to public use.

29. At the discretion of the AO, the operator will take measures to reduce noise produced by the compressor station to levels as low as the noise limits described by COGCC for residential areas.

30. A paleontology monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline or construct the gas plant.

31. Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the AO.

32. Any fence crossing and gates encountered on existing roads on public land that are utilized in construction of the pipeline will require placement of a temporary cattleguard constructed to BLM specifications to keep cattle from straying into other areas.

33. Construction of the line would involve at least nine fence crossings that are on or border public land. Proper fence bracing to BLM standards must be in place when going through a fence so as to maintain proper wire tensions. The effectiveness (control of cattle) of these fences at these crossing points must be maintained at all times during construction and operation of the pipeline.

34. The waterline and watering troughs located along the proposed route in the SE¼SW¼ of section 16, the SE¼NE¼ and the NE¼SW¼ of section 20, all in T2S, R98W will be avoided if possible during construction or replaced in functioning condition if avoidance is not practical. If livestock are present during construction and the waterline and watering troughs are in use, the operator will be required to haul water for livestock for as long as the waterline is not functional.

35. The windmill and stock tank located near the proposed route in the SW¼SE¼ of section 9, T2S, R98W will be avoided by all construction activities. The water-gap fences which converge at the windmill and stock tank will be maintained in operational condition at all times during construction.

36. A "Notice to Proceed" stipulation will be included in the ROW grant for the pipeline gathering system indicating that construction of any of the pipeline will only be permitted to begin when the well it services is producing.

37. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

38. Disturbed areas shall be restored as nearly as possible to their original contour.

COMPLIANCE/MONITORING:

NAME OF PREPARER: WestWater Engineering
2516 Foresight Circle #1
Grand Junction, CO 81505
Telephone: (970) 241-7076

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 11/19/04

ATTACHMENTS: Location Map of the Proposed Action
Map of the Ryan Gulch Pipeline Project Area

Note: As per COA #29, require noise reduction measures to limit noise as described by COGCC for residential areas. Kent E. Walter

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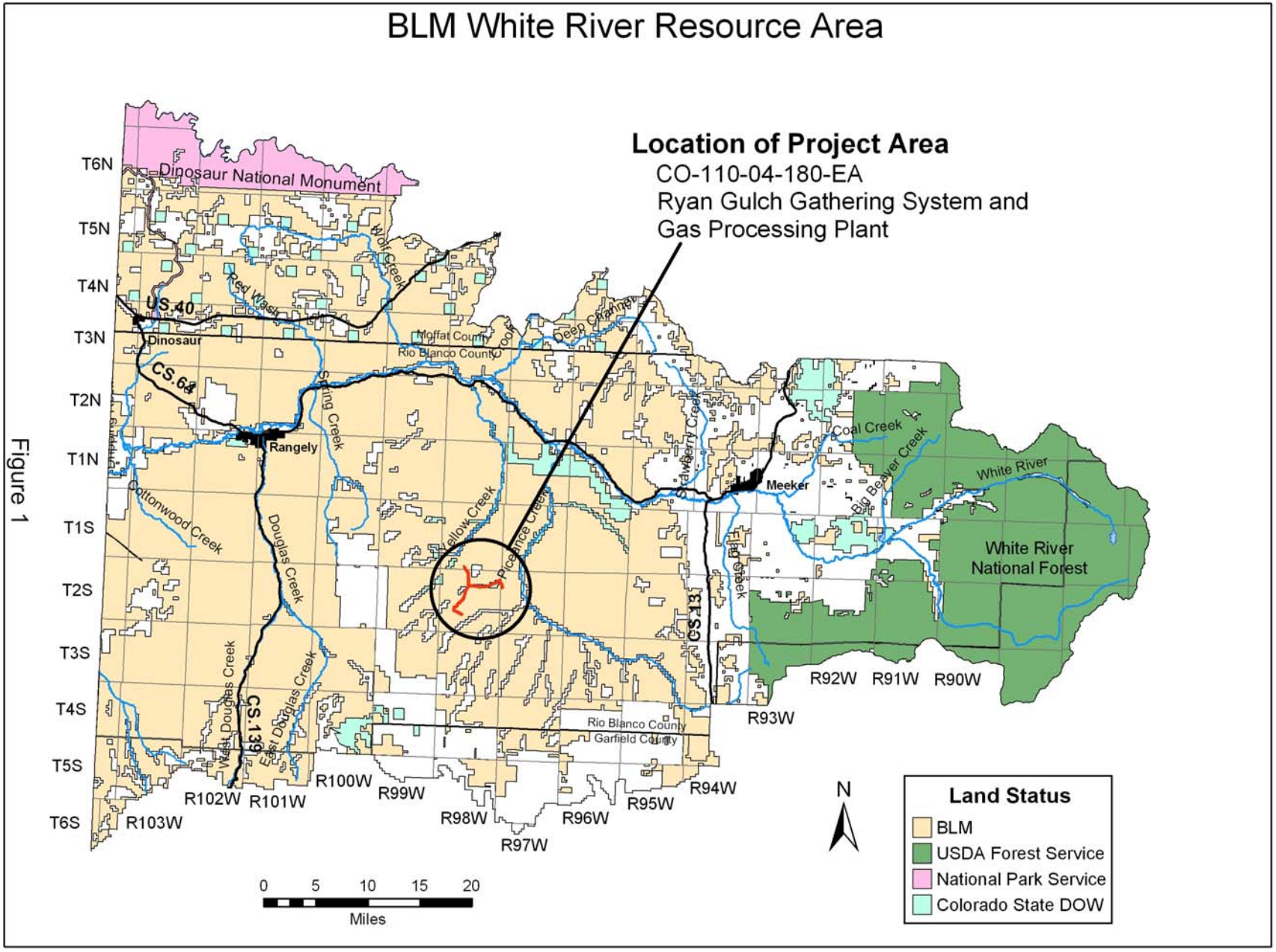
BLM White River Resource Area
Location of Project Area
CO-110-04-180-EA
Ryan Gulch Gathering System and
Gas Processing Plant
Dinosaur National Monument
Dinosaur
Rangely
Meeker
US.40
CS.64
CS.139
CS.13
Moffat County
Rio Blanco County
Garfield County
Red Wash
Wolf Creek
Deep Canyon
Stating Creek
Cottonwood Creek
Douglas Creek
West Douglas Creek
East Douglas Creek
Yellow Creek
Piceance Creek
Strawberry Creek
Coal Creek
Big Beaver Creek
White River
White River
National Forest
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R97W
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R95W
R94W
R93W
R92W
R91W
R90W
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Miles
N
Land Status
BLM
USDA Forest Service
National Park Service
Colorado State DOW

Figure 1

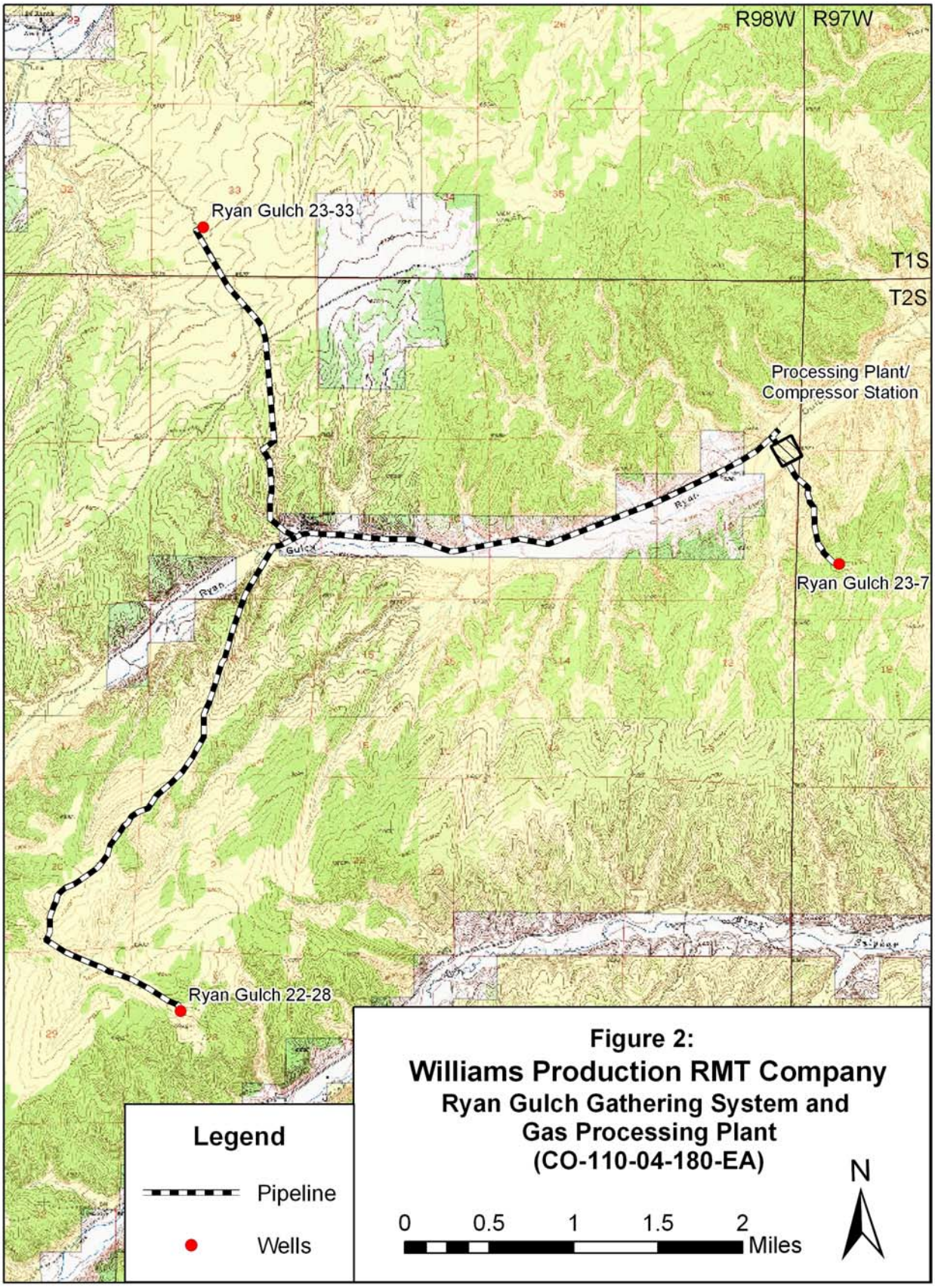

Figure 2:
Williams Production RMT Company
Ryan Gulch Gathering System and Gas Processing Plant
(CO-110-04-180-EA)